



January 12, 2012

Mr. Mark Rowan
Cutting Edge Concrete
c/o Merrell Johnson Companies
22221 Highway 18
Apple Valley, California 92307

RE: Traffic Study – APN 0468-281-26 (San Bernardino County Project Number P201100453)

Dear Mr. Rowan:

Pursuant to your request, and to our subsequent conversation with Ed Petre, San Bernardino County Public Works Department, Albert Grover and Associates is pleased to present to you the following Letter Report, which discusses our findings, conclusions and recommendations relative to access and circulation issues for the proposed modifications to the Cutting Edge Concrete site at 18020 National Trails Highway near Oro Grande, California in unincorporated San Bernardino County.

As determined earlier, the existing and proposed trip generation of this small facility is well below the threshold of conducting a formal traffic study. It is anticipated that on a daily basis there will be five inbound employee trips (during the AM peak hour) and five outbound employee trips (during the PM peak hour), for a total of ten trips on an average day. There will be an estimated additional four trips (two inbound and two outbound) per week for deliveries, and an additional four trips (two inbound and two outbound) per week involving equipment. Given this minimal number of trips, analyses/observations discussed in this brief Letter Report will focus on the relevant traffic access and circulation issues at the site.

Traffic Counts: Traffic counts were conducted on National Trails Highway adjacent to the Cutting Edge Concrete site. The counts were collected on two consecutive mid-week days (Wednesday, December 14 and Thursday, December 15, 2011 – days on which school was in session), broken down by travel direction every 15 minutes. On the highest of the two count days, there were 8,806 vehicles per day (ADT). The Peak Hour volumes were 667 and 737 vehicles per hour for the AM and PM, respectively (see attached traffic counts).

Site Review & Evaluation: Field observations were conducted during the PM period at the site over a two-hour period on a typical week day. The following was observed:

TRANSPORTATION CONSULTING ENGINEERS

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- The traffic flow on National Trails Highway at the site's driveway was evaluated during the PM peak period, which coincides with the normal school traffic activities for the nearby Oro Grande Elementary School, located approximately one mile north of the driveway.
- Although the traffic flow, including school buses and other trucks, was steady during this peak period, ample and frequent gaps were observed, with gaps measuring up to 32 seconds. The great majority of these gaps are more than adequate for trucks to ingress/egress the subject driveway without any significant delays to site traffic or concern to passing traffic on National Trail Highway. During non-peak traffic conditions, even more gaps are expected to be available.
- Observations of sight distance were made relative to the proposed new driveway location. Observed sight distance at the proposed driveway is sufficient on both the north and south of the driveway.
- An existing "SLOW TRUCKS" sign is posted in advance of the site for southbound traffic.
- The proposed street improvements shown on the Conditional Use Permit Site Plan are reasonable and appropriate to enhance traffic safety at the site.

Conclusion: Based on our review of the anticipated site traffic, the existing traffic counts on National Trails Highway, and on our observation of traffic flow, available gaps and sight distance, and on the proposed street improvements, we conclude that the vehicular and truck traffic to and from the Cutting Edge Concrete site should not cause any significant impact to traffic operations on National Trails Highway.

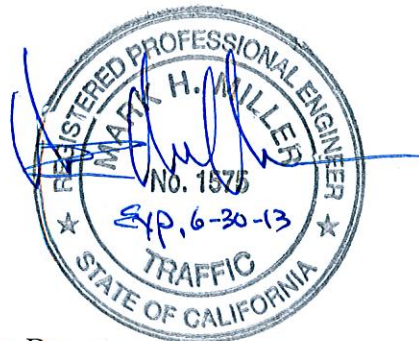
Should you have any questions regarding this matter, please contact me.

Respectfully submitted,

ALBERT GROVER & ASSOCIATES



Mark Miller
Executive Vice President



cc: Ed Petre, County of San Bernardino Public Works Department

Transportation Studies, Inc.

2640 Walnut Avenue, Ste H

Tustin, CA. 92780

City: : ORO GRANDE
Location: : 18020 NATIONAL TRAILS HIGHWAY
Segment: :

Site: SANTIAGO

Date: 12/14/11

Interval	SB				NB				Combined		Day:	Wednesday
Begin	AM	PM			AM	PM			AM	PM		
12:00	10	23	62	244	12	30	54	233	22	53	116	477
12:15	4		68		8		66		12		134	
12:30	3		64		3		52		6		116	
12:45	6		50		7		61		13		111	
01:00	4	18	79	275	6	21	68	270	10	39	147	545
01:15	6		68		4		82		10		150	
01:30	6		68		4		54		10		122	
01:45	2		60		7		66		9		126	
02:00	2	25	65	278	7	38	61	295	9	63	126	573
02:15	9		74		6		76		15		150	
02:30	7		80		16		78		23		158	
02:45	7		59		9		80		16		139	
03:00	8	29	61	340	4	33	78	331	12	62	139	671
03:15	6		110		4		72		10		182	
03:30	7		99		13		92		20		191	
03:45	8		70		12		89		20		159	
04:00	14	81	80	406	7	38	132	417	21	119	212	823
04:15	15		95		12		120		27		215	
04:30	24		132		13		85		37		217	
04:45	28		99		6		80		34		179	
05:00	19	107	108	298	16	110	74	332	35	217	182	630
05:15	35		56		16		102		51		158	
05:30	26		64		30		88		56		152	
05:45	27		70		48		68		75		138	
06:00	33	220	50	162	28	260	60	205	61	480	110	367
06:15	55		52		44		57		99		109	
06:30	46		30		60		42		106		72	
06:45	86		30		128		46		214		76	
07:00	90	338	22	105	102	262	38	173	192	600	60	278
07:15	88		28		48		52		136		80	
07:30	90		38		38		39		128		77	
07:45	70		17		74		44		144		61	
08:00	103	414	16	65	98	263	38	174	201	677	54	239
08:15	104		18		93		51		197		69	
08:30	121		17		34		45		155		62	
08:45	86		14		38		40		124		54	
09:00	64	288	16	34	40	159	33	113	104	447	49	147
09:15	68		8		40		30		108		38	
09:30	88		6		51		28		139		34	
09:45	68		4		28		22		96		26	
10:00	79	292	12	32	48	201	24	75	127	493	36	107
10:15	76		6		42		16		118		22	
10:30	72		8		50		19		122		27	
10:45	65		6		61		16		126		22	
11:00	69	273	10	39	43	217	12	37	112	490	22	76
11:15	70		4		54		16		124		20	
11:30	58		14		52		4		110		18	
11:45	76		11		68		5		144		16	
Totals	2,108		2,278		1,632		2,655		3,740		4,933	
Split%	56.4		46.2		43.6		53.8					

Day Totals 4,386 4,287 8,673
Day Splits 50.6 49.4

Peak Hour 08:00 04:15 06:30 03:30 07:45 04:00
Volume 414 434 338 433 697 823
Factor 0.86 0.82 0.66 0.82 0.87 0.95

Transportation Studies, Inc.

2640 Walnut Avenue, Ste H

Tustin, CA. 92780

City: : ORO GRANDE
 Location: : 18020 NATIONAL TRAILS HIGHWAY
 Segment: :

Site: SANTIAGO
 Date: 12/15/11

Interval	SB				NB				Combined		Day:	Thursday
Begin	AM	PM			AM	PM			AM	PM		
12:00	2	17	68	285	16	36	60	256	18	53	128	541
12:15	4		85		10		64		14		149	
12:30	9		73		8		74		17		147	
12:45	2		59		2		58		4		117	
01:00	4	21	71	263	8	29	66	284	12	50	137	547
01:15	2		56		6		76		8		132	
01:30	8		62		9		74		17		136	
01:45	7		74		6		68		13		142	
02:00	4	29	82	309	4	36	88	337	8	65	170	646
02:15	0		68		12		76		12		144	
02:30	13		76		10		88		23		164	
02:45	12		83		10		85		22		168	
03:00	6	40	62	337	6	19	85	331	12	59	147	668
03:15	16		110		6		84		22		194	
03:30	6		86		1		72		7		158	
03:45	12		79		6		90		18		169	
04:00	3	51	77	376	10	48	109	361	13	99	186	737
04:15	12		103		6		95		18		198	
04:30	12		131		20		74		32		205	
04:45	24		65		12		83		36		148	
05:00	16	107	62	273	12	103	72	324	28	210	134	597
05:15	22		70		17		92		39		162	
05:30	36		71		26		86		62		157	
05:45	33		70		48		74		81		144	
06:00	48	225	52	151	32	254	69	209	80	479	121	360
06:15	39		45		46		42		85		87	
06:30	72		28		62		64		134		92	
06:45	66		26		114		34		180		60	
07:00	106	378	22	71	96	263	47	180	202	641	69	251
07:15	95		15		48		48		143		63	
07:30	83		18		52		39		135		57	
07:45	94		16		67		46		161		62	
08:00	100	369	12	48	80	298	44	163	180	667	56	211
08:15	106		14		99		37		205		51	
08:30	97		12		60		38		157		50	
08:45	66		10		59		44		125		54	
09:00	67	324	15	44	38	196	38	123	105	520	53	167
09:15	80		9		48		39		128		48	
09:30	81		12		58		22		139		34	
09:45	96		8		52		24		148		32	
10:00	88	297	6	36	46	197	26	96	134	494	32	132
10:15	69		10		38		32		107		42	
10:30	81		6		49		20		130		26	
10:45	59		14		64		18		123		32	
11:00	54	297	8	31	54	229	18	55	108	526	26	86
11:15	93		5		63		16		156		21	
11:30	80		13		54		9		134		22	
11:45	70		5		58		12		128		17	
Totals	2,155		2,224		1,708		2,719		3,863		4,943	
Split%	55.8		45.0		44.2		55.0					
Day Totals		4,379				4,427				8,806		
Day Splits		49.7				50.3						
Peak Hour	07:45		03:45		06:30		03:45		07:45		03:45	
Volume	397		390		320		368		703		758	
Factor	0.94		0.74		0.70		0.84		0.86		0.92	